The Center for Astronomy Education Ushers in a New Community-Based Model for Research with CATS
By Gina Brissenden and Ed Prather

The Center for Astronomy Education (CAE), lead by Ed Prather & Gina Brissenden, has been devoted to improving teaching and learning in Astro 101 by conducting fundamental research on student beliefs and reasoning difficulties related to astronomy, as well as instructor implementation difficulties related to teaching astronomy. We use the results of our research to inform the development of research-validated curriculum and assessment materials for use in the Astro 101 classroom. These research-validated curricula and assessment materials frame our professional development CAE Teaching Excellence Workshops for Astro 101 instructors. The primary goal of these professional development workshops is to increase the pedagogical content knowledge of Astro 101 instructors and improve implementation of these curricula and assessment materials.

To create sustainability and broaden the national impact and scope of our work, CAE developed the NSF funded Collaboration of Astronomy Teaching Scholars (CATS) Program in collaboration with other leaders in astronomy education & research (Chris Impey, Steward Observatory; Kevin Lee, Univ. of Nebraska; & Doug Duncan Univ. of Colorado). The primary goals of CATS are to:

1) increase the number of Astro 101 instructors conducting fundamental research in astronomy education;

2) increase the amount of research-validated curriculum & assessment instruments available for use in Astro 101;

3) increase the number of instructors prepared to develop & conduct their own CAE Teaching Excellence Workshops.

To learn more, stop by our CAE Offices (Rooms 203-207, Steward Observatory) or visit our website: http://astronomy101.jpl.nasa.gov/